



**DAVIDSON LAW GROUP**

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August 3, 2018

**VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED**  
**AND EMAIL (CUSTOMERSERVICE@ELCOLIGHTING.COM)**

Mr. Saeed Cohen, President  
Mr. Brandon Cohen, Sales Manager  
AMPS Plus Inc., dba ELCO Lighting  
2042 E. Vernon Avenue  
Vernon, California 90058

*RE: ELCO Lighting's Infringement of DMF Inc.'s Intellectual Property Rights*

Dear Messrs. Saeed and Brandon Cohen:

This firm represents DMF Inc. dba DMF Lighting (“DMF”) in intellectual property litigation matters. As you know, DMF is an award-winning and engineering-driven company known for products that deliver exceptional performance and aesthetics, while saving time and money. DMF invests substantial resources in developing its proprietary technology and designs. DMF’s OneFrame and OneLED products incorporating its technology have earned DMF a reputation for providing high quality LED products that undergo rigorous safety and performance testing.

As you are undoubtedly aware, DMF has a number of issued United States patents and pending U.S. patent applications protecting its award-winning innovations, including U.S. Patent No. 9,964,266 (“the ‘266 Patent”) entitled “Unified Driver and Light Source Assembly For Recessed Lighting” (attached as Exhibit A).<sup>1</sup> DMF also owns the rights to various marks in connection with goods and services it provides. DMF is the owner of the registered marks OneFrame, U.S. Reg. No. 5,032,463, and OneLED, U.S. Reg. No. 5,503,155 (collectively “the marks”) (attached as Exhibit B).

We write to you based on our concern that AMPS Plus Inc., dba ELCO Lighting, (“ELCO”) has been copying DMF’s products and willfully infringing DMF’s patented technology and trademark rights. ELCO has been unfairly competing with DMF and usurping the goodwill that comes from DMF’s innovative technology that consumers associate with DMF products. We demand that ELCO, its officers, and those acting in concert with them immediately cease and desist their infringing sales and other activities designed to unfairly compete with DMF, and take the steps set forth at the end of this letter.

<sup>1</sup> You can easily access the U.S. Patent & Trademark Office’s public Patent Application Information Retrieval (“PAIR”) website (<https://portal.uspto.gov/pair/PublicPair>) to obtain their records on the ‘266 Patent, including documents from the “file wrapper” (or “file history”) which has communications with the U.S. Patent & Trademark Office during the examination of the ‘266 Patent.

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**A. DMF's Patented Technology**

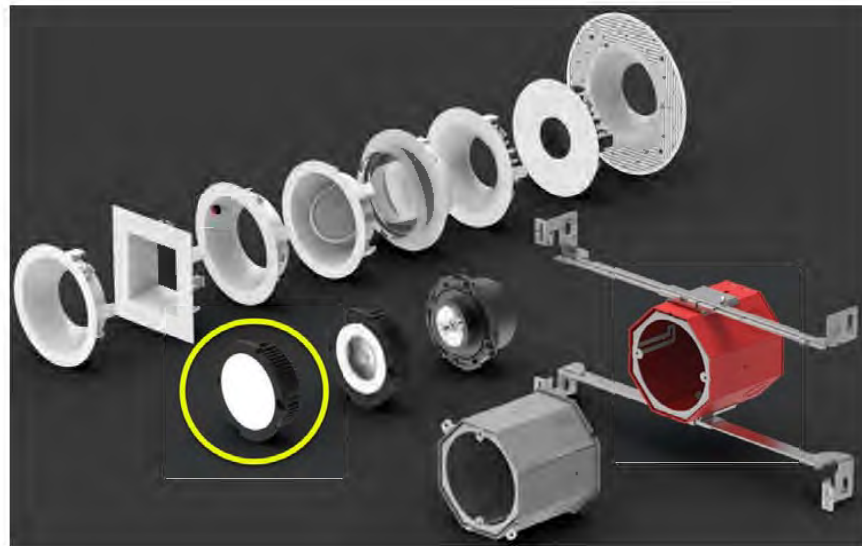
DMF's award-winning products and patented technology includes modular, compact lighting products that are easy to install, versatile and provide more elegant lighting solutions and value than competitors like ELCO. For example, DMF's DRD2 LED Module product, which practices the '266 Patent, is a compact, modular LED module that has a low-profile design enabling it to be placed within many different junction box or light fixture options and a twist-and-lock mechanism that allows tool-free hand attachment of many different trim options:

**DRD2**

Recessed LED Downlight



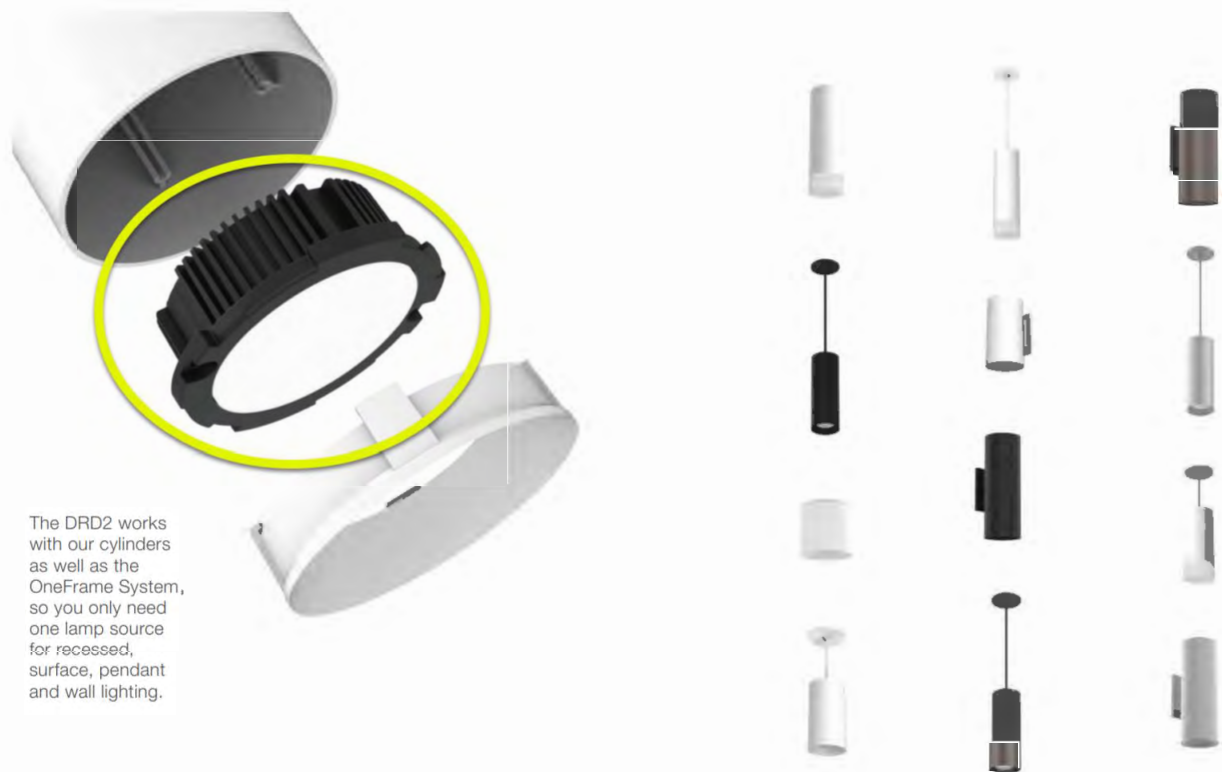
DMF's DRD2 LED Module works in conjunction with DMF's modular OneFrame® System for recessed lighting, which allows modular interoperability of many different and combinable LED modules, trims, junction boxes and light fixtures, some of which are shown below with the DRD2 LED Module circled in yellow:



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The patented DRD2 LED Module also is an important part of DMF's modular DCC2 radiant lighting cylinder system that offers many different sizes, colors and mounting options for LED lighting using the DRD2 LED Module, as shown below with the DRD2 LED Module circled in yellow:



DMF's recessed lighting system using the DRD2 LED Module has received many industry awards for innovative features that enable simplified installation (and the attendant reduction of installation time, labor and material costs) while at the same time meeting applicable codes and allowing precision alignment of the lighting system in ceilings and walls of varying depths.

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### C. ELCO's Acts of Patent Infringement

#### 1. ELCO copied DMF's Patented DRD2 Module

DMF introduced its DRD2 LED Module in 2014. Over three years later, ELCO copied and started selling an imitation of the DRD2 module, including ELCO's Model Nos. ELL08xx and ELL11xx LED Modules ("the ELCO ELL LED Modules"). The images below compare DMF's DRD2 LED Module with figures from DMF's '266 Patent and with marketing and technical information that ELCO provides on the knock-off ELCO ELL LED Module.

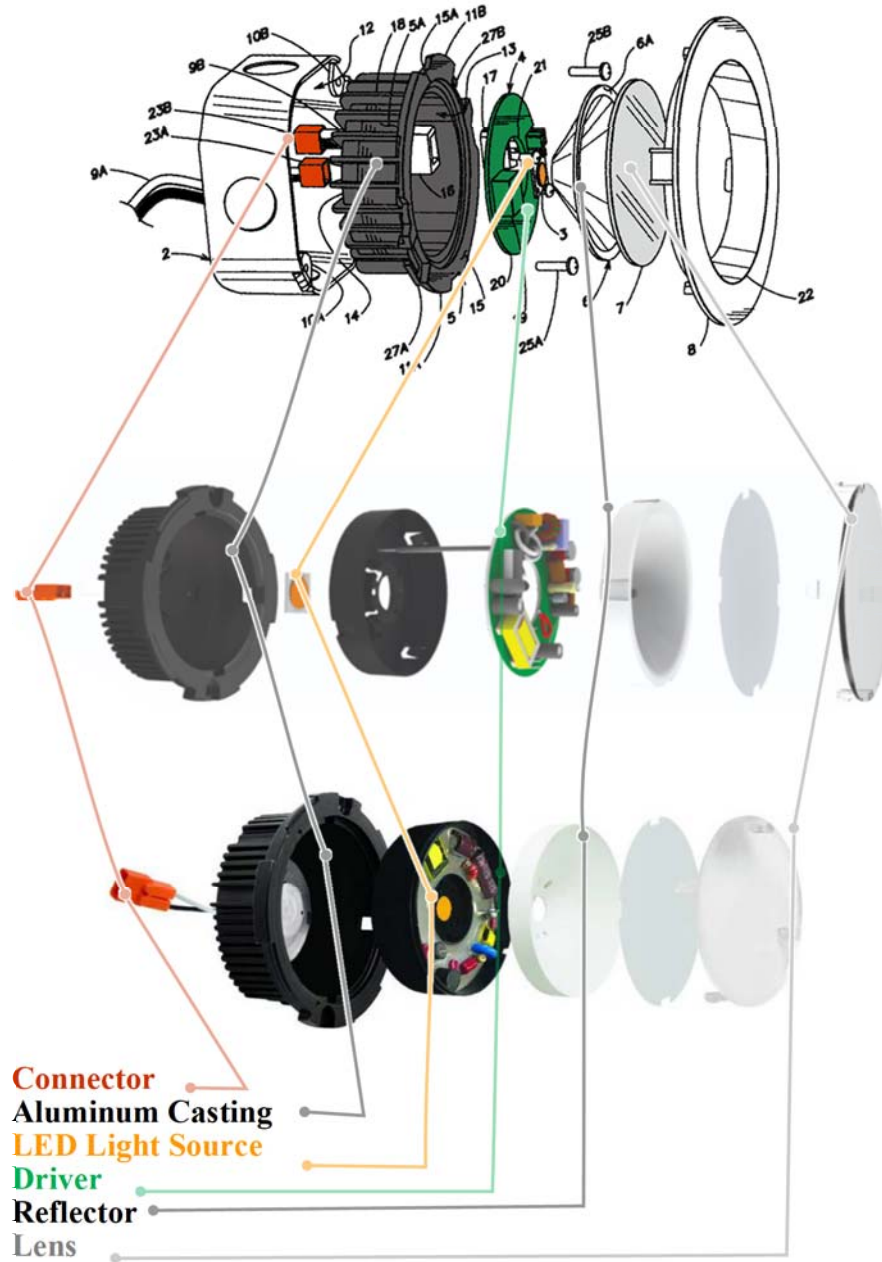
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'266 Patent FIG. 1  
LED Module

DMF DRD2  
LED Module

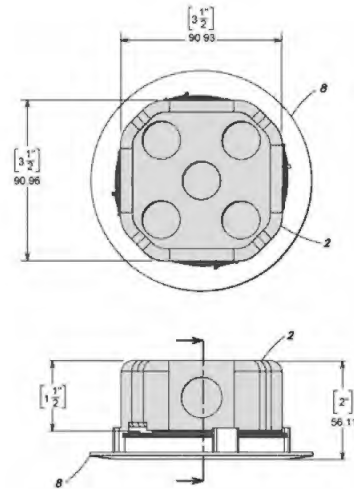
ELCO ELL  
LED Module



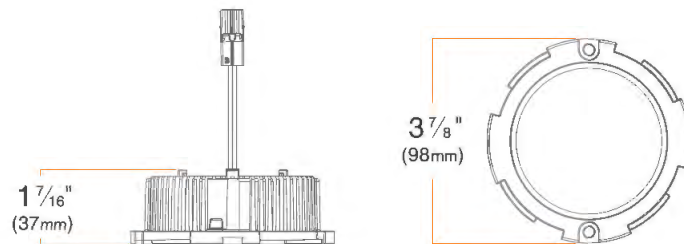
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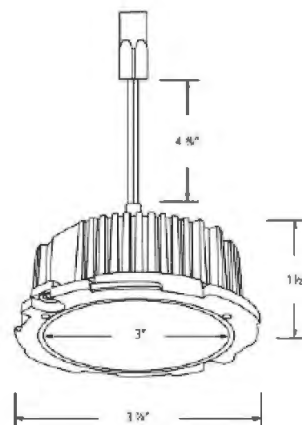
**'266 Patent FIG. 2**  
**LED Module**  
casting – dark grey  
junction box – light grey  
trim- white



**DMF DRD2**  
**LED Module**



**ELCO ELL**  
**LED Module**





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Given ELCO's copying of DMF's patented product, it is no surprise and ELCO should have expected that ELCO's ELL Modules infringe DMF's intellectual property, including the '266 patent. The ELCO ELL Modules fall within the scope of many claims of the '266 Patent.

The ELCO ELL Module has an LED light source that emits light during operation of the LED Module. The LED light source receives regulated power from a donut shaped driver.

The ELCO ELL Module has a heat conducting aluminum casting with a closed rear end, an open front end and a cylindrical sidewall therebetween. The casting has fins formed on the outside of the sidewall and rear end. The aluminum casting significantly dissipates heat generated by the LED light source during operation of the LED Module.

The ELCO ELL Module also has a reflector that, during operation of the LED Module, reflects light emitted from the LED light source out of the open end of the aluminum casting through a lens at the open end of the aluminum casting.

The ELCO ELL Module is assembled by ELCO so that the LED light source, driver, reflector and lens are positioned within the aluminum casting. The LED light source is positioned closer to the rear end of the aluminum casting than the open front end of the casting. The lens helps shield the LED light source from outside contamination, such as when the LED Module is being handled for installation or afterwards, while allowing light from the LED light source to pass through the lens during operation of the LED Module.

The ELCO ELL Module has electrical wires passing through the closed rear face of the aluminum casting for supplying electrical energy to the driver. The wires have a connector at one end that, during installation of the ELL LED Module in a building, can be plugged into a corresponding connector of other wires that receive electrical energy, such as 120-volt electrical energy supplied in the building in which the LED module is installed.

The aluminum casting of the ELCO ELL Module has portions on the open end of the casting that can align with tabs of a junction box to fasten the casting to the junction box – e.g., by inserting a screw through openings in the portions of the ELL LED Module casting that are aligned with holes in tabs of the junction box.

The aluminum casting of ELCO ELL Module is sized so that it can fit within a junction box that is 3-1/2 inches wide and 1-1/2 inches deep (except for an outer rim at the open end of the casting). The width of the closed rear end of the aluminum casting is less than 3-1/2 inches. The height from the outside of the closed rear end to the outside of the open end of the casting is less than 2 inches. The outside width of the aluminum casting's sidewall between the closed rear end and rim at the open front end of the casting is less than 3-1/2 inches wide.



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ELCO specifically instructs customers that its ELCO ELL LED Modules are designed to fit into standard housings and junction boxes. For example, the installation instructions that ELCO provides with its ELL LED Modules entitled “ELCO Lighting Installation Instructions For ELL LED Module” include the excerpt below:

### Housing Compatibility:

The ELL LED module and trims are designed to fit into standard UL listed housings. To determine compatibility, recessed housings must meet minimum dimensions listed below. Refer to the diagram in (Figure 1) for housing dimensions and (Figure 2) for junction box dimensions.

The ELCO ELL LED Module’s aluminum castings has a twist-and-lock configuration at the open end of the casting that allows a trim to be attached to the LED Module by a twist-and-lock connection. As shown on the packaging box for the ELCO ELL LED Module, ELCO’s marketing materials promote the benefits of the ELCO ELL LED Module as including its versatile design and convenient twist-lock attachment of an assortment of trim options as disclosed and claimed in the ‘266 Patent:



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### 2. ELCO Copied DMF's Modular Trims

DMF sells modular trims of varying sizes, forms and colors that can be installed tool free by hand onto the DMF DRD2 LED Module using a twist and lock mechanism. ELCO copied DMF's trims and started selling modular trims specifically designed and sold to be installed tool free by hand onto an ELCO ELL LED Module using a twist and lock mechanism (hereinafter "the ELCO Trims").

### 3. ELCO Copied DMF's Junction Box

In late 2015, DMF introduced its fire rated junction box, Model No. DRDHJ ("the DMF Junction Box"), for use with DMF's DRD2 LED Module-based lighting systems. ELCO copied that product as well. In or around 2018 ELCO started selling the ELCO ELJ4S junction box to be used with ELCO's knock-off ELL LED Module. The photographs below compare the DMF Junction Box as shown in DMF's marketing literature with a marketing photo that ELCO uses to sell its knock-off ELJ4S junction box:



**DMF Junction Box**



**ELCO Junction Box**

ELCO has not only directly infringed numerous claims of the '266 Patent, but also has actively induced other parties to infringe claims of the '266 Patent under 35 U.S.C. § 271(b) by using and selling the ELL LED Module, both alone and in combination with trims, junction boxes, fixtures and other products sold by ELCO or others. In addition, ELCO is liable for contributory infringement under 35 U.S.C. § 271(c) by selling the ELL LED Modules, trims and other products that have no substantial non-infringing uses other than to practice the claimed invention of the '266 Patent.

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**B. ELCO's Acts of Trademark Infringement and Unfair Competition**

On June 26, 2018, the United States Patent & Trademark Office issued to DMF Trademark Registration No. 5503155 on DMF's trademark OneLED for Class 11 covering: LED Lighting Modules; LED luminaires; lighting fixtures; recessed lighting fixtures; recessed ceiling and wall lights; recessed lighting components, namely, light housings, trims, fittings, and wiring, as well as for Class 9 - junction boxes and wiring enclosures for use in connection with recessed lighting. DMF has used the OneLED trademark on its products since at least January 2012.

On August 30, 2016, DMF also was issued United States Trademark Registration No. 5,032,463 on the trademark ONEFRAME for Class 11 - LED luminaires, lighting fixtures, recessed lighting fixtures, recessed ceiling and wall lights; recessed lighting components, namely, light housings, trims, fittings, and wiring, as well as for Class 9 - junction boxes and wiring enclosures for use in connection with recessing lighting. DMF has used the ONEFRAME trademark since at least October 2015.

DMF's registrations are *prima facie* evidence of its ownership of the OneLED and ONEFRAME marks, the validity of the marks, and of DMF's exclusive right to use the marks in commerce on or in connection with the goods or services specified in the registrations. DMF has used and continues to use its OneLED and OneFrame trademarks to help consumers identify its award-winning, modular LED lighting modules and junction boxes, including in advertising and packaging used to sell these products as part of DMF's overall branding efforts.

We have learned that, in conjunction with its copying and imitation of DMF's patented technology, ELCO also is using the confusingly similar name UNO (meaning "ONE") to sell its infringing LED modules, junction boxes, and trims used with its LED modules. It is our understanding that ELCO did not use a trademark using "UNO" or "ONE" to sell LED modules, until it decided to make an identical copy of DMF modules and junction boxes that DMF sold using the OneLED and OneFrame trademarks.

By adopting a confusingly-similar name having the same meaning to promote identical products to the same consumers, and through the same marketing channels, ELCO has caused a likelihood of confusion as to an affiliation, connection, or association between products sold under DMF's OneLED and OneFrame marks and ELCO's UNO mark. ELCO's conduct is even more problematic because its copying extends not just to the trademarks, but to the product line items and even the product packaging – all of which exacerbate the likelihood of consumer confusion. As a result, ELCO is at a minimum liable for common law trademark infringement and unfair competition under California law as well as infringement of a registered mark and unfair competition under the Lanham Act, 15 U.S.C. §§ 1114(1) and 1125(a)(1).

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In addition, in at least one instance of which we are thus far aware, Mr. Brandon Cohen applied for and obtained a patent on the design of the ELCO ELL LED Module by representing that he is the inventor of this design when, in fact, this design was derived from DMF's innovative DRD2 design that had been widely publicized and sold since late 2014. DMF's DRD2 module was publicly introduced and sold more than two years before Mr. Cohen applied for the design patent in February 2017. ELCO lists this patent, U.S. Design Patent D820494, on its website. Mr. Cohen would not have obtained this patent but for the fraud perpetrated on the United States Patent & Trademark Office ("USPTO"). Mr. Cohen violated the rules of the USPTO concerning the duty of candor by failing to disclose DMF's pre-existing DRD2 product from which his claimed design was derived and copied.

As a company built on innovation and engineering, DMF is committed to protecting its intellectual property rights. DMF is equally committed to preventing competitors from causing confusion in the marketplace between its own genuine, quality-controlled products and imitations sold by competitors. Within seven calendar days from the receipt of this letter, we request that you or your legal counsel: (1) confirm that you have ceased and desisted your sale and distribution of the infringing ELL LED Module products; (2) produce the information and documents permitting an accounting of the sales, revenues, and profits on these products; (3) produce documents sufficient to identify the vendors from whom you obtained the ELL LED Module; (4) discontinue use of the infringing UNO mark, and any mark confusingly similar to the DMF marks; (5) provide a list of your prior dissemination of marketing, advertising and other materials (including products) that included the UNO mark (including on the list but not limited to: the identity to whom the materials were sent, what was sent (including volume where identifiable), and the date the materials were sent); (6) take all steps necessary to gather and/or maintain as evidence any infringing ELL LED Module products and any materials and products using the UNO mark; (7) disclaim U.S. Design Patent D820494 and discontinue its use in your marketing; and, (8) acknowledge in writing that you and/or anyone acting at your instruction or on your behalf will desist and refrain from any future infringement or actions that violate DMF's intellectual property rights, or otherwise wrongfully cause harm to DMF as described herein.

Further, you are required to preserve any and all documents relating to this matter, including electronic documents such as emails and electronic copies of accounting records, in any way related to the purchase, sale, marketing, profits, revenues, costs, or disposal of the infringing products, the manufacture of these products, and your knowledge of and copying of DMF's products and designs.

This is not a full statement of DMF's rights and should not be so construed. DMF is continuing to investigate the issues raised in this letter and it specifically reserves, and does not waive, any and all of its rights with respect to this matter, including but not limited to seeking all legal and equitable remedies available for the harm that ELCO, and those acting in concert with and/or on ELCO's behalf or instruction, have caused DMF.

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Thank you for your immediate attention to this matter. I look forward to hearing from you or your attorney.

Very truly yours,



Ben M. Davidson

cc: David W. Long, Esq.  
Ergoniq, LLC

# EXHIBIT A



US009964266B2

(12) **United States Patent**  
**Danesh**

(10) **Patent No.:** **US 9,964,266 B2**  
(45) **Date of Patent:** **May 8, 2018**

(54) **UNIFIED DRIVER AND LIGHT SOURCE ASSEMBLY FOR RECESSED LIGHTING**

(71) Applicant: **Michael D. Danesh**, Beverly Hills, CA (US)

(72) Inventor: **Michael D. Danesh**, Beverly Hills, CA (US)

(73) Assignee: **DMF, Inc.**, Carson, CA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days. days.

(21) Appl. No.: **14/184,601**

(22) Filed: **Feb. 19, 2014**

(65) **Prior Publication Data**

US 2015/0009676 A1 Jan. 8, 2015

**Related U.S. Application Data**

(60) Provisional application No. 61/843,278, filed on Jul. 5, 2013.

(51) **Int. Cl.**  
**F21V 15/00** (2015.01)  
**F21S 8/02** (2006.01)  
(Continued)

(52) **U.S. Cl.**  
CPC ..... **F21S 8/02** (2013.01); **H04R 17/00** (2013.01); **H04R 23/02** (2013.01); **H04R 1/24** (2013.01); **H04R 2499/11** (2013.01)

(58) **Field of Classification Search**  
CPC ..... **F21S 8/02**; **H04R 1/24**  
(Continued)

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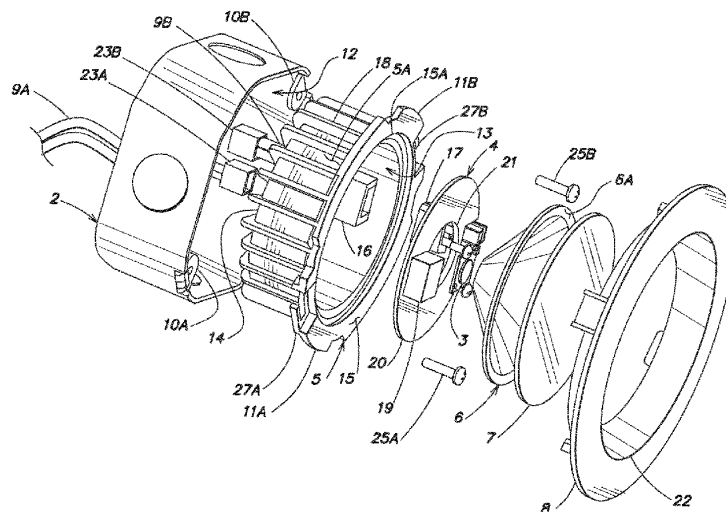
(Continued)

*Primary Examiner* — Tsion Tumebo

(57) **ABSTRACT**

A compact recessed lighting system is provided. The lighting system includes a light source module and a driver separately coupled to a unified casting. The driver is formed in a “donut” shape such that the light source module may be coupled to the casting in the center hole formed by the driver. The lighting system may also include a reflector that surrounds the light source module and shields the driver from exposure to the area surrounding the lighting system. Based on this configuration, the lighting system provides a compact design that allows the combined casting, light source module, driver, and reflector to be installed in a standard junction box instead of a “can” housing structure to reduce the overall cost of the lighting system while still complying with all building and safety codes/regulations. This configuration also allows the lighting system to achieve a UL fire-rating of at least two hours.

**30 Claims, 3 Drawing Sheets**





## US 9,964,266 B2

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	<b>H04R 1/24</b>	(2006.01)			7,503,145 B2 *	3/2009	Newbold	F21S 8/02 52/27
(58)	<b>Field of Classification Search</b>				7,524,089 B2	4/2009	Park	
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	See application file for complete search history.				7,534,989 B2	5/2009	Suehara et al.	
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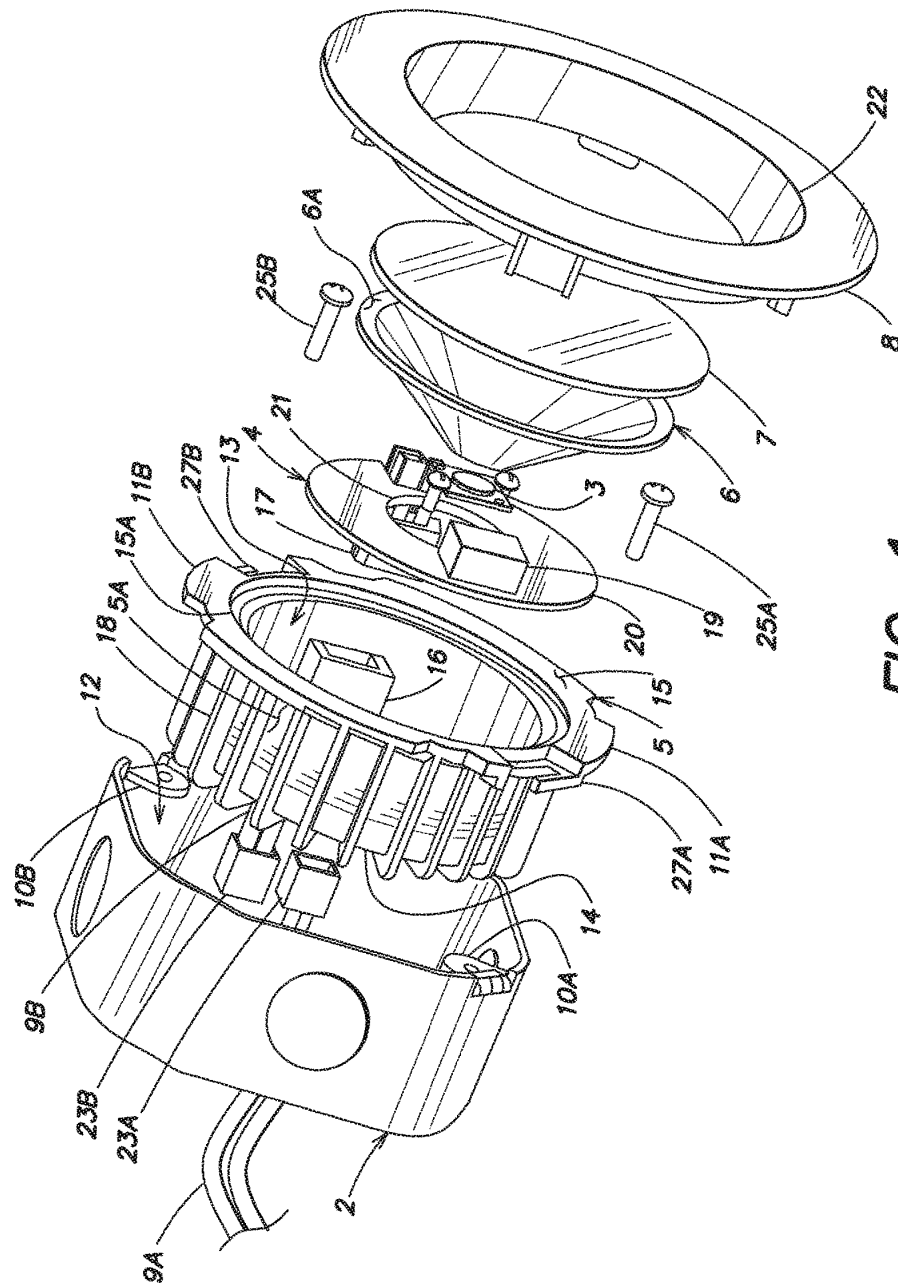


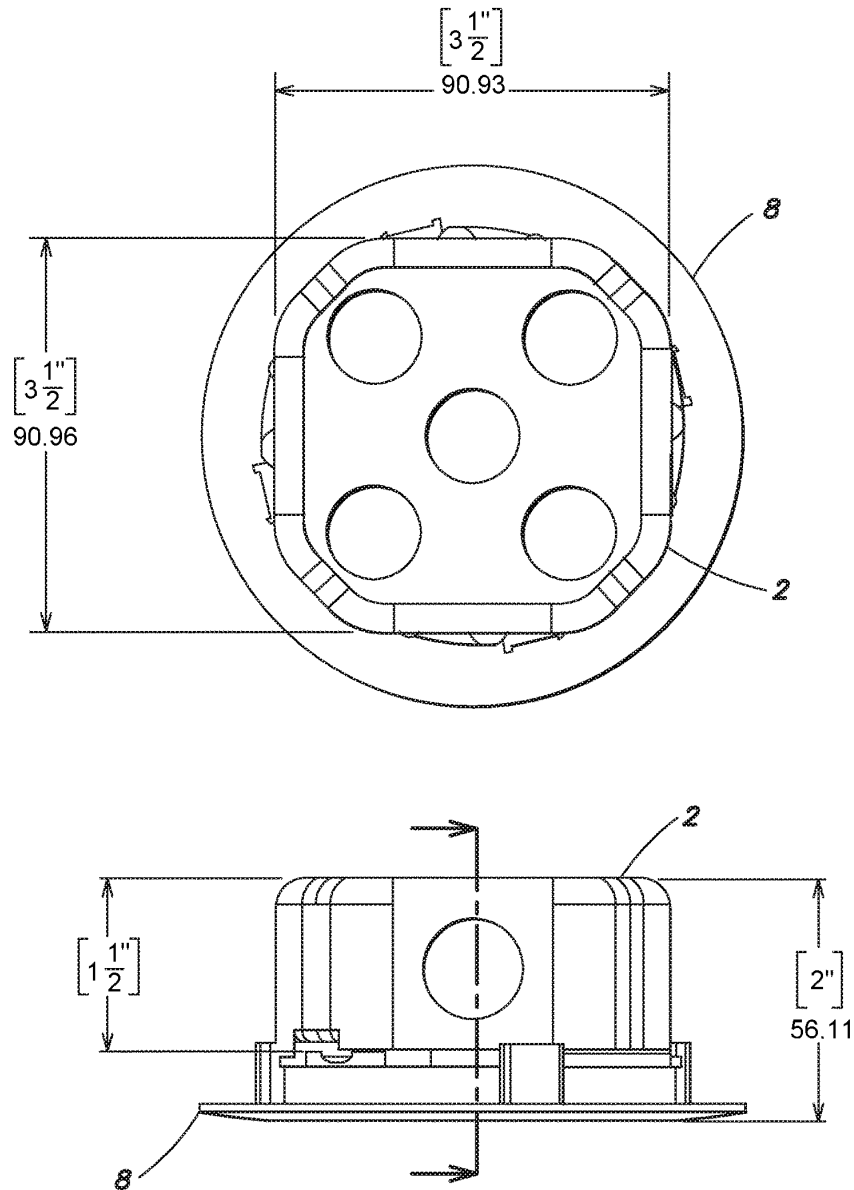
FIG. 1

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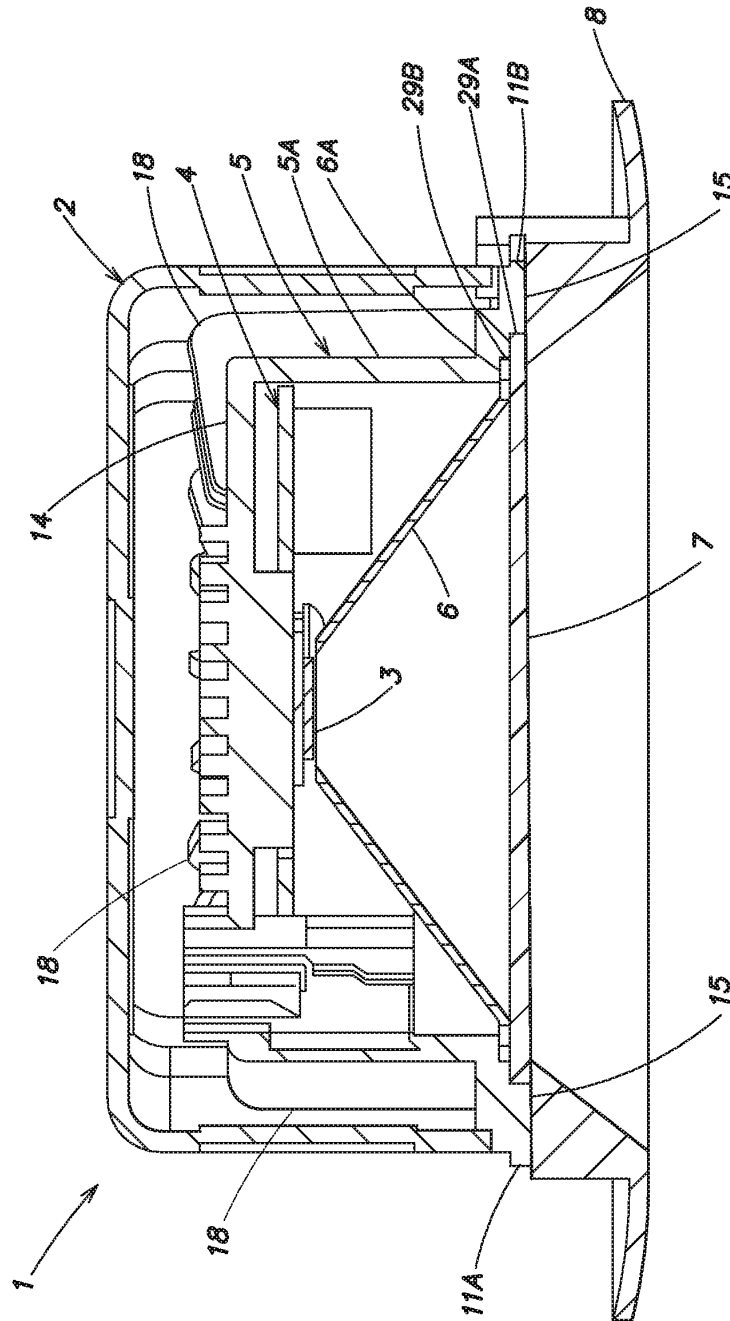
**FIG. 2**

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# **UNIFIED DRIVER AND LIGHT SOURCE ASSEMBLY FOR RECESSED LIGHTING**

## **RELATED MATTERS**

This application claims the benefit of the earlier filing date of U.S. provisional application No. 61/843,278, filed Jul. 5, 2013.

## **FIELD**

An embodiment relates to a compact recessed lighting system that includes a light source module and a driver in a single unified casting, which along with an optical light reflector shields the driver from exposure to outside elements and allows the recessed lighting system to be installed in a standard junction box. In some embodiments, this compact recessed lighting system may be utilized in 4-10" recessed new construction and remodel products and in retrofit applications. Moreover, in some embodiments, this compact recessed lighting system may be utilized with interchangeable trims to accommodate different aperture luminaires. Other embodiments are also described.

## **BACKGROUND**

Recessed lighting systems are typically installed or mounted into an opening in a ceiling or a wall. Recessed lighting systems generally consist of a trim, a light source module, a driver, and a "can" housing. The driver is insulated from other portions and components of the recessed lighting system, including the light source module, through the use of a separate insulating container. The driver may be electrically coupled to the light source module through the use of wires or other conduits such that the driver may power the light source module to emit light.

The separation between the driver and the light source module adds to the combined size of the recessed lighting system. In particular, the use of a separate container that houses the driver separate from the other portions and components of the recessed lighting system, including the light source module, increases the size of the recessed lighting system. This increased size restricts the recessed lighting system to be placed in constrained spaces within a ceiling or a wall and may increase the overall cost of the recessed lighting system.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

The embodiments of the invention are illustrated by way of example and not by way of limitation in the figures of the accompanying drawings in which like references indicate similar elements. It should be noted that references to "an" or "one" embodiment of the invention in this disclosure are not necessarily to the same embodiment, and they mean at least one.

FIG. 1 shows an exploded view of a recessed lighting system according to one embodiment.

FIG. 2 shows top and side views of a junction box according to one embodiment.

FIG. 3 shows a side view of the recessed lighting system according to one embodiment.

## **DETAILED DESCRIPTION**

Several embodiments are described with reference to the appended drawings are now explained. While numerous

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details are set forth, it is understood that some embodiments of the invention may be practiced without these details. In other instances, well-known circuits, structures, and techniques have not been shown in detail so as not to obscure the understanding of this description.

FIG. 1 shows an exploded view of a recessed lighting system 1. The recessed lighting system 1 may include a junction box 2, a light source module 3, a driver (e.g., a power supply) 4, a unified casting 5, a reflector 6, a lens 7, and a trim 8. As will be described in further detail below, the recessed lighting system 1 provides a more compact and cost effective design while complying with all building and safety codes/regulations. Although shown with a single junction box 2 and trim 8, the light source module 3, the driver 4, the unified casting 5, the reflector 6, and the lens 7 may be similarly used with different sized junction boxes 2 and trims 8. Each of the elements of the recessed lighting system 1 will be explained by way of example below.

The junction box 2 is a structure that separates the inner components of the recessed lighting system 1, including electrical wires/cables, from the items inside a ceiling or crawl space (e.g., insulation) in which the junction box 2 has been installed. In one embodiment, the junction box 2 is directly coupled to a stud, beam, or other structural member inside the ceiling or crawl space through the use of resins, clips, screws, bolts, clamps, or any other type of connecting mechanism. The junction box 2 may be equipped with one or more bar-hangers to assist installation when the junction box 2 needs to be located between two studs or joists. In one embodiment, the junction box 2 may be a single or double gang box with a fire rating of up to two hours as described in the National Electrical Code (NEC) and by the Underwriters Laboratories (UL). The junction box 2 may receive electrical wires 9A from an electrical system (e.g., 120 VAC or 277 VAC) within a building or structure in which the recessed lighting system 1 is installed. The electrical wires 9A from the structure may be connected to corresponding wires 9B of the unified casting 5, as will be described in greater detail below.

In one embodiment, the junction box 2 may include one or more tabs 10A, 10B for coupling the junction box 2 to the casting 5. The tabs 10A, 10B may be any device/component for receiving corresponding elements 27A, 27B of the casting 5 to firmly hold the weight of the unified casting 5, the light source module 3, the driver 4, the reflector 6, the lens 7, and/or the trim 8 up against the junction box 2. As shown in FIG. 1, the tabs 10A, 10B include holes for receiving screws or bolts 25A, 25B through the corresponding elements 27A, 27B; however, in other embodiments the tabs 10A, 10B may facilitate a twist-and-lock friction connection with corresponding elements 27A, 27B of the casting 5 and without the use of separate tools or other devices. In still other embodiments, friction or tension clips may be utilized to couple the casting 5 to the junction box 2.

In one embodiment, the junction box 2 acts as a heat barrier to block heat emitted by the light source module 3 and the driver 4 from reaching possibly flammable items inside a ceiling or crawl space. In these embodiments, the junction box 2 may be formed of metals, polymers, metal alloys, and/or other heat insulating materials. As shown in FIG. 1, the junction box 2 may be a polygon that defines a cavity 12 therein. However, in other embodiments, the junction box 2 may be any suitable shape, including an ellipsoid, cone, or cylinder that is capable of receiving therein the casting 5. The cavity 12 that is formed in the junction box 2 may be larger than the casting 5 such that the casting 5 may easily fit into the cavity 12 without coming

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into direct contact with the walls of the cavity 12. However, in other embodiments, the casting 5 may be sized to come into direct contact with the walls of the cavity 12. The size of the cavity 12 may be pursuant to popular industry specifications for junction boxes and in compliance with all applicable building and safety codes/regulations. For example, as shown in FIG. 2, the junction box 2 may have a length of 3½ inches, a width of 3½ inches and a depth of 1½ inches. When coupled together, the combined junction box 2, light source module 3, driver 4, casting 5, reflector 6, lens 7, and trim 8 may have a height/depth of 2 inches.

The junction box 2 is a shell and/or enclosure that further prevents the exposure of heat from the light source module 3 and the driver 4 to the items inside a ceiling or crawl space (e.g., insulation) in which the recessed lighting system 1 has been installed. The casting 5 may be formed of metals, polymers, metal alloys, and/or other materials. As shown in FIG. 1, the casting 5 may be a cylindrical structure that defines a casting cavity 13 therein. However, in other embodiments, the casting 5 may be any suitable shape, including an ellipsoid, cone, or polygon that is capable of housing the light source module 3 and the driver 4. As shown in FIGS. 1 and 3, the cavity 13 is to receive therein the light source module 3 and the driver 4.

In one embodiment, the casting 5 may include a closed rear face 14 and an open front face 15a. The closed rear face 14 allows the light source module 3 and the driver 4 to be securely mounted to the casting 5, while the open front face 15a provides an aperture to allow light emitted by the light source module 3 to be exposed to an outside environment surrounding the recessed lighting system 1 (e.g., into a room). In one embodiment, the rear face 14 of the casting 5 may include one or more mounting elements for receiving and securely holding the light source module 3 and the driver 4. In some embodiments, the mounting elements may be holes, flaps, or other structures designed to receive the light source module 3 and the driver 4. The mounting elements may be capable of receiving resins, clips, screws, bolts, clamps, or any other type of connecting mechanism such that the light source module 3 and the driver 4 may be securely coupled inside the cavity 13 on the rear face 14 of the casting 5. In one embodiment, the light source module 3 and the driver 4 are removably coupled to the casting 5 while in other embodiments one or more of the light source module 3 and the driver 4 form a single continuous and indivisible component with the casting 5.

Although described as a casting 5, the casting 5 may be formed through other processes other than casting techniques. For example, the casting 5 may be formed through an extrusion process or formed through the welding of metal sheets to form a structure. Further, although described as an enclosed assembly, the casting 5 may be any heat conducting structure to which the light source module 3 and the driver 4 are mounted and which can be mounted, using any type of fasteners or mounting elements, to the junction box 2.

In one embodiment, the electrical wires 9A received by the junction box 2 from the electrical system of a building or structure may be coupled to the electrical wires 9B of the casting 5. The electrical wires 9A may be coupled to the electrical wires 9B through the use of electrical caps or other devices. For example, as shown in FIG. 1, the electrical wires 9A and 9B may be connected using the connectors 23A and 23B. The connectors 23A and 23B are complementary, keyed or interlocking connectors. The electrical wires 9B of the casting 2 may terminate in a connector holder 16 that may receive a corresponding connector 17 of the driver 4. In one embodiment, the connectors 16 and 17 are com-

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plementary, keyed or interlocking connectors similar to the connectors 23A and 23B described above. When the connectors 16 and 17 are engaged, electricity may pass from the electrical system of the building or structure to the driver 4.

In one embodiment, the casting 5 includes one or more heat sinks 18 to dissipate heat generated by the light source module 3 and/or the driver 4. Although the heat sinks 18 are shown as passive components that cool the combined casting 5, light source module 3, and driver 4 by dissipating heat into the surrounding air, active heat sinks (e.g., fans) may also be used. In one embodiment, the heat sinks 18 are defined by a set of fins surrounding the casting 5. The heat sinks 18 may be composed of any thermally conductive material. For example, the heat sinks 18 may be made of aluminium alloys, copper, copper-tungsten pseudoalloy, AlSiC (silicon carbide in aluminium matrix), Dymalloy (diamond in copper-silver alloy matrix), E-Material (beryllium oxide in beryllium matrix), and/or thermally conductive plastics or ceramics.

As described above, the recessed lighting system 1 may include the driver 4. The driver 4 is an electronic device that supplies and/or regulates electrical energy to the light source module 3 and thus powers the light source module 3 to emit light. The driver 4 may be any type of power supply, including power supplies that deliver an alternating current (AC) or a direct current (DC) voltage to the light source module 3. In one embodiment, the driver 4 receives electricity from the casting 5 via a connector. In one embodiment, the connector 17 is coupled to the connector holder 16 of the casting 5 such that electrical wires are not protruding from the casting 5. In this embodiment, the supply connection from the driver 4 terminates in connector 17, which is force-fitted into connector holder 16. In another embodiment, the driver 4 may connect to the supply wires, 9A, via wire nuts.

Upon receiving electricity, the driver 4 may regulate current or voltage to supply a stable voltage or current within the operating parameters of the light source module 3. The driver 4 receives an input current from the electrical system of the building or structure in which the recessed lighting system 1 is installed and drops the voltage of the input current to an acceptable level for the light source module 3 (e.g., from 120V-240V to 36V-48V). The driver 4 may transfer electricity to the light source module 3 through an electrical connector. For example, the driver 4 may deliver electricity to the light source module 3 through an electrical cable coupled between the light source module 3 and the driver 4 through removable or permanent connectors or soldered leads originating from the driver 4. Although shown with magnetic transformer 19, the driver 4 may include additional circuitry for regulating current to the light source module 3.

As shown in FIG. 1, the driver 4 may also include the board 20 for holding the magnetic transformer 19 and other circuitry. In one embodiment, the board 20 is formed in a "donut", torus, or "C" shape with an opening 21. The outside edge of the board 20 is coupled to the casting 5, while the opening 21 formed by the board 20 allows the light source module 3 to be directly coupled to the casting 5 without coming into direct contact with the driver 4. By forming a structure with the opening 21, the driver 4 allows the light source module 3 to avoid the driver 4, eliminating shadows or interference from the driver 4, and allows the light source module 3 to directly contact the casting 5, assisting the casting 5 to dissipate heat generated by the light source module 3. This compact structure allows the light source module 3 and the driver 4 to be contained within the unified

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casting 5, which in turn may fit inside a standard junction box (i.e., junction box 2) and/or a 4-8 inch recessed lighting fixture (both incandescent and non-incandescent). Accordingly, the recessed lighting system 1 can operate without the use of a “can” housing structure. This simplified and more compact structure reduces the cost and complexity of installing the recessed lighting structure 1 into an existing/pre-

installed junction box or a newly installed junction box. Further, this configuration allows the recessed lighting system 1 to achieve a UL fire-rating of at least two hours.

In one embodiment, the board 20 may be a printed circuit board. The driver 4 may be coupled to the casting 5 using any connecting mechanism, including resins, clips, screws, bolts, or clamps. For example, in one embodiment, the driver 4 may be coupled to the casting 5 using friction or tension clips.

The light source module 3 may be any electro-optical device or combination of devices for emitting light. For example, the light source module 3 may have as a single light source a light emitting diode (LED), organic light-emitting diode (OLED), or polymer light-emitting diode (PLED). In some embodiments, the light source module 3 may have multiple light sources (e.g., LEDs, OLEDs, and/or PLEDs). The light source module 3 receives electricity from the driver 4, as described above, such that the light source module 3 may emit a controlled beam of light into a room or surrounding area. The driver 4 is designed to ensure that the approximate voltage and current are fed to the light source module 3 to enable the emission of light by the one or more light sources within the light source module 3.

As described above and shown in FIG. 1, the light source module 3 is coupled to the casting 5 in the opening 21 formed by the board 20. As described above, by positioning the light source module 3 in the opening 21, the light source module 3 may avoid the driver 4, thus eliminating shadows or interference from the driver 4, and allowing the light source module 3 to directly contact the casting 5, such that the casting 5 can dissipate heat generated by the light source module 3. Further, this compact design allows the recessed lighting system 1 to utilize a standard sized junction box (e.g., junction box 2) instead of a “can” housing structure. As shown in FIG. 1, the light source module 3 is coupled to the casting 5 using screws; however, in other embodiments, the light source module 3 may be coupled to the casting 5 using any connecting mechanism, including resins, clips, screws, bolts, or clamps. For example, in one embodiment, the light source module 3 may be coupled to the casting 5 using friction or tension clips. In one embodiment, the casting 5 may include an insulating gasket 25 that separates the board 20 and the casting 5. The insulating gasket 25 may be placed on a groove 24 that encircles the open front face 15a of the casting 5. The insulating gasket 25 may be formed of materials that provide some degree of malleability and/or flexibility such that the gasket 25 is able to deform and tightly fit within the groove 24, including any slight irregularities. For example, the insulating gasket 25 may be formed of plastic, rubber, metal, and/or ceramic materials. The insulating gasket 25 assists in insulating the driver 4 from the outside environment.

In some embodiments, the recessed lighting system 1 may include the reflector 6. The reflector 6 may surround the light source module 3 and/or a light source of the light source module 3 to adjust the way light emitted by the light source module 3 is focused inside a room or surrounding area. In one embodiment, the reflector 6 surrounds the light source module 3 and separates the light source module 3 from the driver 4. This separation allows light from the light source

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module 3 to be emitted into a room or surrounding area while further shielding the driver 4 from being exposed to the room or surrounding area. For example, in one embodiment, the reflector 6 and the casting 5 may be coupled together such that the combined assembly may create a sealed structure to shield the driver 4 from the outside environment and the light source module 3. By shielding the driver 4 from the outside environment, the reflector 6 reduces the risk of fire or other dangers and ensures the recessed lighting system 1 complies with building and safety codes/regulations. The reflector 6 may be formed of any fire retardant material, including steel, aluminum, metal alloys, calcium silicate, and other similar materials.

In one embodiment, the reflector 6 may be coupled to the casting 5 using screws, rivets or other fasteners. The reflector 6 may also be designed as a snap fit into the casting 5.

Although shown as conical, the reflector 6 may be formed in any shape that may direct and/or focus light. For example, the reflector 6 may be parabolic, spherical, or a frusto-conical shape that is positioned over the light source module 3 while shielding the driver 4. In one embodiment, the reflector 6 may be coated with a reflecting material or include one or more reflecting elements that assist in the adjustment of light emitted by the light source module 3. For example, the reflector 6 may be coated with a shiny enamel or include one or more mirrors or retroreflectors or a microcellular polyethylene terephthalate (MCPET) material to adjust the focus of light emitted by the light module 3. In other embodiments, the reflector 6 may include various other optic elements to assist in the focusing of light emitted by the light source module 3.

In one embodiment, the recessed lighting system 1 may include a lens 7. The lens 7 may be formed to converge or diverge light emitted by the light source module 3. The lens 7 may be a simple lens comprised of a single optical element or a compound lens comprised of an array of simple lenses (elements) with a common axis. In one embodiment, the lens 7 also provides a protective barrier for the light source module 3 and shields the light source module 3 from moisture or inclement weather. The lens 7 may also assist in the diffusion of light and increase the uniformity of light over the surface of the recessed lighting system 1. The lens 7 may be made of any at least partially transparent material, including glass and hard plastics. In one embodiment, the lens 7 and the reflector 6 are contained in a single indivisible unit to work in conjunction to focus and adjust light emitted by the light source module 3. In other embodiments, the lens 7 and the reflector 6 are separate, divisible elements as shown in FIG. 1.

In one embodiment, the recessed lighting system 1 may include a trim 8. The trim 8 serves the primary purpose of covering the exposed edge of the ceiling or wall where a hole is formed in which the recessed lighting system 1 resides while still allowing light from the light source module 3 to be emitted into a room through an aperture 22. In doing so, the trim 8 helps the recessed lighting system 1 appear seamlessly integrated into the ceiling or wall. In one embodiment, the trim 8 is capable of coupling to the casting 5 while in other embodiments the trim 8 is capable of coupling to the junction box 2. The trim 8 may couple to the casting 5 and/or the junction box 2 using any connecting mechanism, including resins, clips, screws, bolts, or clamps. In one embodiment, the trim 8 may include grooves and/or slots to couple to corresponding grooves and/or slots of the casting 5 and/or the junction box 2 using a twist-and-lock friction connection and without the use of separate tools or other devices.

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In one embodiment, different diameter trims **8** may be capable of being coupled to the casting **5** and/or the junction box **2**. The size and design of the trims **8** may depend on the size of the hole in which the recessed lighting system **1** has been fitted and that the trim **8** must conceal, as well as the aesthetic decisions of the consumer. The trims **8** may be made of aluminum plastic polymers, alloys, copper, copper-tungsten pseudoalloy, AlSiC (silicon carbide in aluminum matrix), Dymalloy (diamond in copper-silver alloy matrix), and E-Material (beryllium oxide in beryllium matrix).

As described above, the light source module **3** and the driver **4** may be integrated into the unified casting **5** while shielding the driver **4** from exposure to outside elements through the use of the reflector **6** or the lens **7**. Based on this configuration, the compact recessed lighting system **1** provides a more compact design that allows the combined unified casting **5**, light source module **3**, driver **4**, and reflector **6** to be installed in a standard junction box instead of a "can" housing structure to reduce the overall cost of the recessed lighting system **1** while still complying with all building and safety codes/regulations. This configuration also allows the recessed lighting system **1** to achieve a UL fire-rating of at least two hours.

While certain embodiments have been described and shown in the accompanying drawings, it is to be understood that such embodiments are merely illustrative of and not restrictive on the broad invention, and that the invention is not limited to the specific constructions and arrangements shown and described, since various other modifications may occur to those of ordinary skill in the art. The description is thus to be regarded as illustrative instead of limiting.

As shown in FIG. **1** and in FIG. **2**, a trim **8** is assembled and retained to housing **5** by interlocking with twist-and-lock flanges **11A**, **11B** formed integrally with housing **5**. The two twist and lock flanges **11A** **11B** are better seen in FIG. **1** to extend radially from diametrically opposite sides of the front end face **15** integrally with side wall **5a** of housing **5**, and the forward surfaces of the locking flanges **11A** **11B** are seen to be flush with the front end face **15**.

As best seen in FIG. **3** flanges **11A**, **11B** also are substantially coplanar with the lens **7** as well as coplanar with a first circular rabbet recess **29A** defined along an inner edge of front end face **15** and containing the lens **7**. Consequently, with the lens installed in the rabbet, the front or exterior surface of lens **7** and forward surfaces of the flanges **11A**, **11B** define a nearly planar front surface for the compact light.

The unitary structure of the housing **5** and the coplanar location of the trim interlocking flanges **11A**, **11B** allow a reduction in total height of the compact light as measured between lens **7** and rear wall **14**. Such reduced height in turn facilitates installation of the light in a standard but relatively small junction box which already has received a sufficient fire rating, so that the compact light can be installed in a ceiling directly in a j-box without use of a "can", as has been explained previously herein, thus greatly simplifying installation of the compact light.

The rabbet may be a two step rabbet, as seen in FIGS. **1** and **3**, such that the lens **7** is held in the larger diameter outer rabbet **29A** and a rim **6a** of reflector **6** is held in the smaller diameter inner rabbet **29B**.

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What is claimed is:

1. A compact recessed lighting system, comprising:
  - a light source module for emitting light;
  - a driver for powering the light source module to emit light, the driver including an electronic device to at least one of supply and regulate electrical energy to the light source module;
  - a unified casting with a heat conducting closed rear face, a heat conducting sidewall and an open front face wherein the heat conducting sidewall is joined to the heat conducting closed rear face at one end and defines the open front face of the unified casting at another end, wherein the heat conducting sidewall has a first dimension between the heat conducting closed rear face and the open front face of less than 2 inches and extends 360 degrees around a center axis of the unified casting to define a first cavity that extends forward from the heat conducting closed rear face to the open front face of the unified casting and outward to the heat conducting sidewall, wherein the light source module and the driver are positioned inside the first cavity while being coupled to the heat conducting closed rear face of the unified casting such that the light source module is closer to the closed rear face of the unified casting than the open front face of the unified casting, and wherein the unified casting includes a plurality of elements positioned proximate to the open front face so as to align with corresponding tabs of a standard junction box and thereby facilitate holding the unified casting up against the standard junction box when the unified casting is installed in the standard junction box; and
  - a reflector positioned inside the first cavity of the unified casting and coupled to and surrounding the light source module such that the reflector directs light produced by the light source module into an area surrounding the compact recessed lighting system while enclosing the driver from exposure to the area surrounding the compact recessed lighting system,
  - wherein the heat conducting closed rear face and the heat conducting sidewall of the unified casting significantly dissipate heat generated by the light source module during operation of the light source module.
2. The compact recessed lighting system of claim 1, wherein the driver is donut shaped or "C" shaped.
3. The compact recessed lighting system of claim 1, further comprising a trim directly coupled to the unified casting, wherein the trim connects to the unified casting through use of retention clips or springs.
4. The compact recessed lighting system of claim 1, wherein:
  - the light source module is a light emitting diode (LED) module; and
  - the light source module is coupled to the heat conducting closed rear face of the unitary casting using at least one of a resin, one or more clips, one or more bolts, one or more screws, and one or more clamps.
5. The compact recessed lighting system of claim 1, further comprising:
  - a lens to shield the light source module while being transmissive to light emitted by the light source module.
6. The compact recessed lighting system of claim 1, further comprising:
  - an inner enclosure for enclosing the driver within the unified casting.



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7. The compact recessed lighting system of claim 1, wherein the heat conducting sidewall of the unified casting has heat sink fins formed on its outside surface.

8. The compact recessed lighting system of claim 1, further comprising:

the standard junction box having a closed rear end, an open front end, and a sidewall surrounding a second cavity,

wherein:

the heat conducting closed rear face of the unified casting has a second dimension across the closed rear face that is less than 3½ inches; and

the unified casting, with the light source module, the driver and the reflector therein, are substantially contained within the second cavity of the standard junction box.

9. The compact recessed lighting system of claim 8, wherein the unified casting is directly attached to the standard junction box via the plurality of elements of the unified casting and the corresponding tabs of the standard junction box.

10. The compact recessed lighting system of claim 9, further comprising:

a first plurality of wires electrically coupled to the driver, wherein the first plurality of wires passes through the heat conducting closed rear face of the unified casting; and

a second plurality of wires that emerge from the standard junction box and that are to bring electricity from an electrical system of a building in which the recessed lighting system is to be installed,

wherein the first plurality of wires are connected to the second plurality of wires through a plurality of caps or a connector inside of the standard junction box.

11. The compact recessed lighting system of claim 9, wherein the plurality of elements of the unified casting and the corresponding tabs of the standard junction box facilitate use of at least one of screws, bolts, twist-and-lock connections and friction or tension clips to directly attach the unified casting to the standard junction box.

12. The compact recessed lighting system of claim 8, wherein the standard junction box is a fire rated junction box having an Underwriters Laboratories (UL) fire-rating of at least two hours.

13. The compact recessed lighting system of claim 1, wherein the reflector separates the driver from the light source module such that the reflector directs the light produced by the light source module into an area surrounding the compact recessed lighting system while enclosing the driver from exposure to the area surrounding the compact recessed lighting system.

14. The compact recessed lighting system of claim 1, wherein:

the unified casting includes at least one rabbet proximate to the first cavity; and

the heat conducting closed rear face of the unified casting includes one or more mounting elements to receive and hold at least one of the light source module and the driver.

15. The compact recessed lighting system of claim 1, wherein the unified casting includes at least one twist-and-lock connector integrated in the unified casting.

16. The compact recessed lighting system of claim 15, further comprising:

a trim directly coupled to the unified casting, for covering a hole in a ceiling or wall of a building in which the compact recessed lighting system is placed, wherein

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the trim connects to the unified casting via the at least one twist-and-lock connector.

17. A compact recessed lighting system, comprising:

a light source module for emitting light;

a driver for powering the light source module to emit light, the driver including an electronic device to at least one of supply and regulate electrical energy to the light source module;

a heat conducting unified casting with a closed rear face, a sidewall and an open front face wherein the sidewall is joined to the closed rear face at one end and defines the open front face of the unified casting at another end, wherein the sidewall defines a cavity that extends forward from the closed rear face to the open front face of the unified casting and outward to the sidewall, wherein the light source module and the driver are positioned inside and completely contained within the cavity of the unified casting such that the light source module is closer to the closed rear face of the unified casting than the open front face of the unified casting and sits behind a ceiling or a wall when the unified casting is installed in a hole in the ceiling or the wall; and

a reflector positioned inside the cavity of the unified casting and coupled to and surrounding the light source module such that the reflector directs light produced by the light source module into an area surrounding the compact recessed lighting system while enclosing the driver from exposure to the area surrounding the compact recessed lighting system,

wherein the heat conducting unified casting significantly dissipates heat generated by the light source module during operation of the light source module.

18. The system of claim 17, wherein:

the light source module is a light emitting diode (LED) module;

the light source module is coupled to the unified casting using at least one of a resin, one or more clips, one or more bolts, one or more screws, and one or more clamps; and

the sidewall of the heat conducting unified casting has fins formed on its outside surface.

19. The compact recessed lighting system of claim 17, wherein:

the heat conducting unified casting includes a plurality of elements positioned on the unified casting so as to align with corresponding tabs of a standard-sized junction box.

20. The compact recessed lighting system of claim 17, wherein:

the heat conducting unified casting has at least a first dimension across the closed rear face that is less than 3½ inches and a second dimension along the sidewall, between the closed rear face and the open front face, that is less than 2 inches.

21. The compact recessed lighting system of claim 17, wherein:

the heat conducting unified casting includes a plurality of elements positioned on the unified casting so as to align with corresponding tabs of a standard-sized junction box;

the heat conducting unified casting has at least a first dimension across the closed rear face that is less than 3½ inches and a second dimension along the sidewall, between the closed rear face and the open front face, that is less than 2 inches; and

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the lighting system further comprises a plurality of wires coupled to the driver and passing through the heat conducting unified casting.

**22.** A compact recessed lighting system, comprising:

a light source module for emitting light; 5  
a driver for powering the light source module to emit light, the driver including an electronic device to at least one of supply and regulate electrical energy to the light source module;

a unified casting with a closed rear face, a sidewall and an open front face wherein the sidewall is joined to the closed rear face at one end and defines the open front face of the unified casting at another end, wherein the sidewall extends 360 degrees around a center axis of the unified casting to define a cavity that extends 10 forward from the closed rear face to the open front face of the unified casting and outward to the sidewall, wherein the light source module and the driver are positioned inside the cavity of the unified casting such that the light source module is closer to the closed rear face of the unified casting than the open front face of the unified casting; and

a reflector positioned inside the cavity of the unified casting and coupled to and surrounding the light source module such that the reflector directs light produced by the light source module into an area surrounding the compact recessed lighting system while enclosing the driver from exposure to the area surrounding the compact recessed lighting system, 20

wherein:

the light source module is a light emitting diode (LED) module; 30

the sidewall of the unified casting has fins formed on its outside surface; and

the system further comprises a plurality of wires connected to the driver and connected to a first connector of a pair of complimentary keyed or interlocking connectors, such that in operation the first connector is coupled to a second connector of the pair of complimentary keyed or interlocking connectors, wherein the second connector is coupled to electricity from an electrical system of a building in which the compact recessed lighting system is installed. 35

**23.** The system of claim **22**, wherein:

the driver has a shape that allows installation of the driver within the unified casting and allows direct contact of the light source module to the unified casting. 40

**24.** The system of claim **23**, wherein:

the system further includes the second connector of the pair of complimentary keyed or interlocking connectors, coupled to the first connector of the pair of complimentary keyed or interlocking connectors; 45

a first end of the plurality of wires is coupled to the first connector of the pair of complimentary keyed or interlocking connectors, and a second end of the plurality of wires is coupled to a connector holder inside the cavity of the unified casting; and 50

the driver includes a corresponding connector that is complimentary to the connector holder inside the cavity of the unified casting, such that when the connector holder and the corresponding connector are engaged, electricity passes from the electrical system of the building to the driver. 55

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**25.** The compact recessed lighting system of claim **22**, wherein:

the unified casting is heat conducting;

the unified casting includes a plurality of elements positioned on the unified casting so as to align with corresponding tabs of a standard-sized junction box; and the sidewall has a first dimension between the closed rear face and the open front face of less than 2 inches.

**26.** A lighting system, comprising:

a substantially heat conducting unified casting forming a casting cavity having a front face and a rear heat conducting portion and having dimensions to fit inside a standard-sized junction box, the substantially heat conducting unified casting including a plurality of elements positioned on the casting so as to align with corresponding tabs of the standard-sized junction box; a light source module, disposed in the casting cavity, to emit light, wherein the light source module is positioned in the casting cavity closer to the rear heat conducting portion than the front face of the substantially heat conducting unified casting; 10

a driver, disposed in the casting cavity, to power the light source module; and

a reflector, disposed in the casting cavity to cover the driver and to direct light produced by the light source module out of the front face, 15

wherein the substantially heat conducting unified casting significantly dissipates heat generated by the light source module during operation of the light source module.

**27.** The lighting system of claim **26**, wherein the heat conducting unified casting has a depth dimension of less than 2 inches and at least one of a width dimension and a length dimension of less than 3½ inches.

**28.** The lighting system of claim **26**, further comprising: a plurality of wires coupled to the driver in the casting cavity and passing through the unified casting and outside the casting cavity, 20

wherein the plurality of wires passes through the rear heat conducting portion of the unified casting, and wherein the lighting system further comprises:

a first connector of a pair of complimentary keyed or interlocking connectors, coupled to a first end of the plurality of wires.

**29.** The lighting system of claim **26**, wherein:

the unified casting includes at least one rabbet proximate to the casting cavity;

the unified casting has a depth dimension of less than 2 inches and at least one of a width dimension and a length dimension of less than 3½ inches;

the unified casting has a closed rear face;

the closed rear face includes one or more mounting elements to receive and hold at least one of the light source module and the driver; and

the plurality of wires passes through the closed rear face of the unified casting.

**30.** The lighting system of claim **26**, further comprising an enclosure to substantially contain the unified casting, wherein the enclosure comprises one of:

the standard-sized junction box; and  
a 4-8 inch recessed lighting fixture.

\* \* \* \* \*

# EXHIBIT B



# United States of America

United States Patent and Trademark Office

## OneLED

**Reg. No. 5,503,155**

**Registered Jun. 26, 2018**

**Int. Cl.: 9, 11**

**Trademark**

**Principal Register**

DMF, Inc. (CALIFORNIA CORPORATION)  
1118 East 223rd Street  
Carson, CALIFORNIA 90745

CLASS 9: Junction boxes and wiring enclosures for use in connection with recessed lighting

FIRST USE 1-00-2012; IN COMMERCE 1-00-2012

CLASS 11: LED Lighting Modules; LED luminaires; lighting fixtures; recessed lighting fixtures; recessed ceiling and wall lights; recessed lighting components, namely, light housings, trims, fittings, and wiring

FIRST USE 1-00-2012; IN COMMERCE 1-00-2012

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT STYLE, SIZE OR COLOR

SER. NO. 87-731,868, FILED 12-22-2017



*Andrei Iancu*

Director of the United States  
Patent and Trademark Office

# United States of America

United States Patent and Trademark Office

## ONEFRAME

**Reg. No. 5,032,463**

**Registered Aug. 30, 2016**

**Int. Cl.: 9, 11**

**Trademark**

**Principal Register**

DMF, Inc. (CALIFORNIA CORPORATION)  
1118 East 223rd Street  
Carson, CA 90745

CLASS 9: Junction boxes and wiring enclosures for use in connection with recessed lighting

FIRST USE 10-2-2015; IN COMMERCE 10-2-2015

CLASS 11: LED luminaires, lighting fixtures, recessed lighting fixtures, recessed ceiling and wall lights; recessed lighting components, namely, light housings, trims, fittings, and wiring

FIRST USE 10-2-2015; IN COMMERCE 10-2-2015

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT STYLE, SIZE OR COLOR

SER. NO. 86-419,607, FILED 10-09-2014  
CAIT WATTS-FITZGERALD, EXAMINING ATTORNEY



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